

WHAT IS CLAIMED IS:

1. A watertight plate including a channel sidewall which is in contact with a cover plate to demarcate a channel,

5 wherein, on the channel sidewall, formed are:

a first step portion in contact with the cover plate;

10 a second step portion which is closer to the channel and lower than the first step portion and is applied with a sealing resin; and

a third step portion which is closer to the channel and lower than the second step portion and within which a resin lump of the sealing resin is housed.

15 2. A power supply device including a watertight plate with electronic parts including a switching element, a transformer and a rectifier mounted thereon, said watertight plate having a channel sidewall in contact with a cover plate and demarcating a channel through which a coolant flows for cooling said electronic parts,

20 wherein, on the channel sidewall, formed are:

a first step portion in contact with the cover plate;

25 a second step portion which is closer to the channel and lower than the first step portion and is

applied with a sealing resin; and

a third step portion which is closer to the channel and lower than the second step portion and within which a resin lump of the sealing resin is housed.

5

3. A power supply device including a watertight plate with electronic parts including a switching element, a transformer and a rectifier mounted thereon, said watertight plate having a channel sidewall in contact with a cover plate and demarcating a channel through which a coolant flows for cooling said electronic parts,

wherein, on the channel sidewall, formed are: a first step portion in contact with the cover plate; a second step portion which is closer to the channel and lower than the first step portion and is applied with a sealing resin; and a third step portion which is closer to the channel and lower than the second step portion and within which a resin lump of the sealing resin is housed; and

the channel is demarcated when the sealing resin is applied onto the second step portion of the watertight plate and the cover plate is brought into contact with the first step portion of the watertight plate.

25